

## **CALIFORNIA CONTENT STANDARDS:**

1g: Students know that spectral lines are the result of transitions of electrons between energy levels and that these lines correspond to photons with a frequency related to the energy spacing between levels by using Planck's relationship, (E=hv)

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## **CALIFORNIA CONTENT STANDARDS:**

5.3.2: Identify the source of atomic emission spectra

5.3.3: Explain how the frequencies of emitted light are related to changes in electron energies.

Stamp Work Bill Nye Light and Color

**Bill Nye Light Optics** 

**Energy Levels of Hydrogen** 

Lecture:

PPT. Light and Atomic Spectra (Pg. 32 NB)

Looking at atomic spectra using gas spectrum tubes...

Lab: Lab #8 Light Spectrum (Pg. 33 NB)

Students will record the electromagnetic spectrum using polymer sheets with defracted Bright Line Spectrum for each

of the gas tubes demonstrated.

They will use their colored pencils to finish the lab data.

Group

Work: Atoms and Molecules

Home Work: None